-continued

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( i i ) MOLECULE TYPE: peptide
    ( i i i ) HYPOTHETICAL: NO
      ( x i ) SEQUENCE DESCRIPTION: SEQ ID NO:83:
       Cys Pro Ile Cys Leu Glu Leu Leu Lys Glu Pro Val Ser Ala Asp Cys
       Arg Asn Thr Asp Gly Lys Gly Asn Cys Pro Val Cys Arg
(2) INFORMATION FOR SEQ ID NO:84:
       ( i ) SEQUENCE CHARACTERISTICS:
              ( A ) LENGTH: 41 amino acids
              (B) TYPE: amino acid
              ( C ) STRANDEDNESS:
              ( D ) TOPOLOGY: linear
     ( i i ) MOLECULE TYPE: peptide
    ( i i i ) HYPOTHETICAL: NO
     ( x i ) SEQUENCE DESCRIPTION: SEQ ID NO:84:
      Cys Pro I le Cys Leu Asp Met Leu Lys Asn Thr Met Thr Thr Lys Glu
1 10 15
      Cys Leu His Arg Phe Cys Ser Asp Cys Ile Val Thr Ala Leu Arg Ser
20 25
      Gly Asn Lys Glu Cys Pro Thr Cys Arg
(2) INFORMATION FOR SEQ ID NO:85:
      ( i ) SEQUENCE CHARACTERISTICS:
             ( A ) LENGTH: 42 amino acids
              ( B ) TYPE: amino acid
              ( C ) STRANDEDNESS:
              ( D ) TOPOLOGY: linear
     ( i i ) MOLECULE TYPE: peptide
    ( i i i ) HYPOTHETICAL: NO
     ( x i ) SEQUENCE DESCRIPTION: SEQ ID NO:85:
      Cys Pro Vai Cys Leu Gin Tyr Phe Ala Glu Pro Met Met Leu Asp Cys
1 5 10
      Gly His Asn Ile Cys Cys Ala Cys Leu Ala Arg Cys Trp Gly Thr Ala
20 25 30
      Cys Thr Asn Val Ser Cys Pro Gin Cys Arg
                                              40
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What is claimed is:

- An isolated DNA coding for a BRCA1 polypeptide, said polypeptide having the amino acid sequence set forth in SEO ID NO:2.
- 2. The isolated DNA of claim 1, wherein said DNA has  $_{60}$  the nucleotide sequence set forth in SEQ ID NO:1.
- 3. The isolated DNA of claim 1 which contains BRCA1 regulatory sequences.
- 4. The isolated DNA of claim 2 which contains BRCA1 regulatory sequences.
- 5. An isolated DNA having at least 15 nucleotides of the DNA of claim 1.

- 6. An isolated DNA having at least 15 nucleotides of the DNA of claim 2.
  - 7. An isolated DNA selected from the group consisting of:(a) a DNA having the nucleotide sequence set forth in SEQ ID NO:1 having T at nucleotide position 4056;
  - (b) a DNA having the nucleotide sequence set forth in SEQ ID NO:1 having an extra C at nucleotide position 5385;
  - (c) a DNA having the nucleotide sequence set forth in SEQ ID NO: 1 having G at nucleotide position 5443; and, (d) a DNA having the nucleotide sequence set forth in SEQ ID NO:1 having 11 base pairs at nucleotide positions 189-199 deleted.

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